# Add a Network Device

Not planning to do this module? You can skip to the next section.

This module consists of the following exercises:

Module	Description	Time required
Configure Global SNMP Settings	Configure up.time to use standard SNMP settings to add network devices with Auto Discovery.	1/2 slice
Add and Auto Discover Network Devices	Use Auto Discovery to detect SNMP devices on the network.	1 slice
Review Your Current Inventory and View a Quick Snapshot for a Network Device	View metrics available on a summary page for a network device.	1/2 slice

## **Configure Global SNMP Settings**

Prerequisite: You will need to know the SNMP settings for the device you want to add.

- In the up.time Web interface, begin by clicking Config, then clicking Global Element Settings in the left pane. As you did with agent- and WMIbased servers in the previous track, you can create a common definition that many or all of your SNMP devices use, allowing you to auto discover large groups that share the same properties.
- 2. In the SNMP Global Credentials section, click Edit Configuration:

🗘 up.tıme	Dashboards	My Portal	My Infrastructure	Services	Users	Reports	Config	Search up.time	admin 🔻 SysList Help	
Config		up.time	Agent Global Configur	ation					Edit Configuration	
License Info		Agent Po	rt Number 9998							
User Auther										
Archive Poli		Use SSL (	HTTPS) ×							
<ul> <li>Mail Servers</li> <li>Remote Rep</li> </ul>		Test Con	figuration							
<ul> <li>Problem Rep</li> </ul>			tname to verify:							
<ul> <li>Global Elem</li> </ul>		Test Conf								
Bulk Element		WMI Ag	entless Global Credent	ials					Edit Configuration	
VMware VC	enter Orchestrator	Windows	Domain wmi							
▶ up.time Con	figuration	Username	administrator							
		Password	*****							
		Test Con	figuration							
		Enter hos	tname to verify:							
		Test Conf								
		SNMP GI	obal Credentials						Save	
		SNMP Ver	sion v3			*			10	
		SNMP Por	t 1	61						
		Username	networ	kadmin						
		Authentio	ation Password							
		Authentio	ation Method MD5			Ŧ				
		Privacy P	assword	•••••						
		Privacy T	ype DES			Ŧ				
			Pingable?							
			figuration							
			tname to verify:							
		Test Conf	iguration							

3. Select the SNMP Version for this common SNMP definition.

- 4. Configure the settings similar to those shown above:
  - **SNMP Port:** The port on which the network device is listening.
  - Username: (v3) The name that is required to connect to the network device.
  - Authentication Password: (v3) The password that is required to connect to the network device.
  - Authentication Method: (v3, optional) From the list, select an option that will determine how encrypted information traveling between the network device and up.time will be authenticated.
  - Privacy Password: (v3) The password that will be used to encrypt information traveling between the network device and up.time.
  - Privacy Type: (v3, optional) From the list, select an option that will determine how information traveling between the network device and up time will be encrypted.
  - Read Community: (v2) A string that acts like a user ID or password, giving you access to the network device instance.

5. Click Save.

Validation Step: Test the global setting by entering a SNMP device in the Test Configuration section.

## Add a Network Device Using Auto Discovery

- 1. Click My Infrastructure, then click Auto Discovery in the left pane.
- 2. In the Auto Discovery pop-up, confirm that you want to Discover Servers and Network Devices on Your Network, and click Next.
- 3. In the next step, select **Network Devices with SNMP**, and ensure the **Use Global SNMP Connection Configuration** check box you defined in the previous exercise is selected.

Auto Discovery Step 2 of 4			
#1 - What Types Of Elemen	ts Would You Like To Discover?		
Servers with up.time Agen	t		
Servers with Windows Mar	agement Instrumentation (WMI)		
Servers with Net-SNMP v2	or v3		
Network Devices with SNM	p		
Please Provide Connectio	n Information for SNMP		
Use Global SNMP Conr	ection Configuration		
#2 - What Subnet Would Yo	u Like To Search In?		
Subnet (format 255.255.x)	10.1.54.1-100		
#3 - What Group Would Yo	Like Elements Placed In?		
Element Group	My Infrastructure	V	
			Cancel Back Next

4. Enter the subnet or an IP address range, similar to above.

### Pro Tip

Although we are keeping things simple, and using a single subnet or IP address range as shown above, there are other ways to point up.time at subnets and subnet ranges to expedite the Auto-Discovery process. See Using Auto Discovery for more information.

#### 5. Click Next to start the Auto Discovery process.

Auto Discovery St	tep 3 of 4			
Please Select Whi	ch Elements To Add.			
Discovery Progress	*			
Hide elements t	hat are already added.			
	Connection	IP	Host Name	Info
Looking for elements.	nothing found yet.			Cancel Back Add

6. When all network devices on the subnet or subnet range have been detected, you will be able to make selections to add to your up.time inventory. Select an SNMP device, similar to below:

Please Select Which Ele	ments To Add		
Discovery Progress			
Hide elements that are	e already added.		
All + Connection		♦ Host Name	♦ Info
🗌 🧓 Network Device	10.1.54.1	SUX 6000	Ethernet Routing Switch
🔲 🧓 Network Device	10.1.54.2	SUX 6001	Ethernet Routing Switch
📄 🧓 Network Device	10.1.54.3	snswtch3	Ethernet Switch
🔲 🧓 Network Device	10.1.54.6	ARP24T-1	Neyland 24T
🗌 🧓 Network Device	10.1.54.7	ARP24T-2	Neyland 24T
🔲 🧓 Network Device	10.1.54.9	ARP24T-3	Neyland 24T
🖌 🧓 Network Device	10.1.54.10	PowerConnect9000	PowerConnect 5448
🗌 🧓 Network Device	10.1.54.16	ciscoball	Cisco IOS Software, C3750E Software (C3750E-IPBASEK9-M), Version 12.2(55
🔲 🕹 Network Device	10.1.54.22	hpswtch	PROCURVE J9029A - PA.03.01
🗌 🕹 Network Device	10.1.54.25	eswtch2	Ethernet Routing Switch Cancel Back Add

7. Scroll to the bottom of the Auto Discovery list, and click Add. As a final step, you will receive confirmation that the network device is now part of your monitored inventory.

Attempting to add 1 ele	ments	
, IP	♦ Status	
10.1.54.10	Added as Network Device with snmp	

8. Click Done.

## **Review Your Current Inventory**

After adding the network device and closing the **Auto Discovery** window in the previous exercise, the main up.time browser window is at the **My Infrastructure** view. Refresh the page (or click **My Infrastructure**) to ensure the latest additions appear immediately:

<b>Up.time</b> Dashboards	My Portal	My Infrastructure	Services	Users	Reports	Config	Search up.time	admin 🔻 SysList	: Help
Infrastructure Add System/Network Device Add Application	8	Please click on 'Auto Right click on elemen For more information	ts in the tree t	o perform a	dditional actio	ons.	d to up.time.		
<ul> <li>Add Service Level Agreement</li> <li>Infrastructure Groups</li> <li>Add Group</li> <li>Add View</li> <li>Auto Discovery</li> <li>Auto Discovery</li> </ul>		structure Discovered Hosts Discovered Virtual Mac Cleaner (10.1.52.23) March (10.1.52.13) PowerOver9000 (Powe V-Center win-ken		8)				C	ollapse All

If you followed the exercises that comprised the vCenter Server track and physical server track, your inventory already includes a vCenter Server Element (along with its Infrastructure Groups), as well as an agent-based Linux server, and WMI-based Windows server. In addition, you will now see the network device you added in the previous exercise. Your inventory is now a mix of virtual and physical servers on different platforms, and network devices. Also note the platform-specific icons beside each Element type.

Validation Step: Click a newly added server's gear icon. Then in the pop-up menu, click Graph Performance to go to its Quick Snapshot.

Uashboards	My Portal	My Infrastructure	Services	Users	Reports	Config	Search up.time	admin 🔻 SysList	Help
Graphing Services Info Services Status: PowerConnect 5448] [PowerConnect 5448]									
Device Status Quick Snapshot		%	Packet Los			2	Average Rou	nd Trip Time	×.
Network		-	% Packet Los	s			- Average R	Round Trip Time	
▶ I/O									
Errors	કર						E SE		
NetFlow									
Metrics Service Metrics		18:00	18. Jun	06	00	12:00	18:00 18. J	un 06:00	12:00
	Port Stat	tus							
	No current	performance data available	If you have ju	ist added ti	nis element, di	ata will be av	vailable soon.		

Over the last three tracks of this "Add Elements to up.time" module, you have viewed the Quick Snapshot for different Element types: a vCenter Server, a VM, servers, and now an SNMP-based network device. Similar to a newly-added server in the previous module, there is not yet any performance data for this device to display, but there will be shortly. After moving through more of this Getting Started Guide, we will return to this Quick Snapshot to view some data.

**Back: Add Physical Servers** 

**Next: Tour the Interface**